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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|-----------------------|------------------|
| 10/727,374 | 12/04/2003 | Ram M. Rao | S01.12-1007/STL 11516 | 6966 |

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SEAGATE TECHNOLOGY LLC C/O WESTMAN
CHAMPLIN & KELLY, P.A.
SUITE 1400
900 SECOND AVENUE SOUTH
MINNEAPOLIS, MN 55402-3319

EXAMINER

EVANS, JEFFERSON A

ART UNIT PAPER NUMBER

2627

DATE MAILED: 06/30/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | | |
|------------------------------|---------------------------------------|-----------------------------------|--|
| Office Action Summary | Application No. 10/727,374 | Applicant(s) RAO ET AL. | |
| | Examiner Jefferson A. Evans | Art Unit 2627 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on 4-7-2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-23 is/are pending in the application.
 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3,8-13,16-18,21 and 22 is/are rejected.
- 7) ☒ Claim(s) 4-7, 14, 15, 19, 20, and 23 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

This application is a Continuation-In-Part of Serial No. 09/832,050 filed 4-10-2001, now U.S. Patent No. 6,678,119.

Claims 1 to 23 are pending.

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1, 3, 8-13, 16, 17, and 21 are rejected under 35 U.S.C. 102(e) as being anticipated by Sannino et al (U.S. 6,490,135). As per Claims 1 and 21: Note figure 2 for example which shows a slider 110 comprising an aerodynamic surface which comprises: a first bearing surface 218, disposed on the aerodynamic surface, defining a bearing height; a cavity floor 236 disposed on the aerodynamic surface at a cavity depth below the bearing height; and a first recessed pressurization surface 222, which will provide above-ambient fluid pressure when the slider is in nominal flight, which is greater than fluid pressure provided elsewhere on a trailing half of the aerodynamic surface at a substantial displacement from a longitudinal centerline of the aerodynamic surface; the first recessed pressurization surface being disposed on the aerodynamic surface at a recessed depth which is between the bearing height and the cavity depth. The first recessed pressurization surface is recessed 0.1 to 0.5 microns while the cavity

Art Unit: 2627

floor is recessed 1 to 3 microns. As per Claim 3: the first recessed pressurization surface 222 includes channel bottom surface 272 and this surface extends close enough the slider trailing end 202 to be considered proximate thereto. As per Claim 8: there is a recessed pressurization surface 222 adjacent each of the sides 204,206 of the slider so one of them can be considered the first recessed pressurization surface and one can be considered the second recessed pressurization surface. As per claim 9: the second recessed pressurization surface 222 will be between the first bearing surface 218 and the trailing end 202 of the slider. As per Claim 10: there are left and right side bearing surfaces and there are left and right recessed pressurization surfaces and the recessed pressurization surfaces are between the bearing surfaces and the trailing edge of the slider. Claim 11: surface 230 reads on a third surface at the recessed depth. Claim 12: surface 242 reads on a bearing surface adjacent the trailing edge of the slider and including a data interface head 244. As per Claim 13: note channel 260 which includes side walls and a back dam and is open at a leading side. As per Claim 16: cavity dam leading edge 232 can be considered an aerodynamic surface leading wall. As per Claim 17: the slider includes a data interface head 244.

The applied reference has a common assignee with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 102(e) might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not the invention "by another," or by an appropriate showing under 37 CFR 1.131.

Art Unit: 2627

3. Claims 2, 18, and 22 rejected under 35 U.S.C. 102(e) as being anticipated by Griffin et al (U.S. 6,501,621). Note figure 1 for example which shows a slider 100 comprising an aerodynamic surface which comprises: a first bearing surface 134, disposed on the aerodynamic surface, defining a bearing height; a cavity floor 136 disposed on the aerodynamic surface at a cavity depth below the bearing height; and first and second recessed pressurization surfaces 114,118 which will provide above-ambient fluid pressure when the slider is in nominal flight, which is greater than fluid pressure provided elsewhere on a trailing half of the aerodynamic surface at a substantial displacement from a longitudinal centerline of the aerodynamic surface; the recessed pressurization surfaces being disposed on the aerodynamic surface at a recessed depth which is between the bearing height and the cavity depth. The recessed pressurization surfaces are recessed 50 to 300 nanometers for example while the cavity floor is 500 to 3000 nanometers.

Basis for the recessed depth being at most 550 angstroms is not found in the parent application and thus the effective filing date for this limitation is 12-4-2003 and Griffin may properly be applied in a rejection of claims including this limitation.

Allowable Subject Matter

4. Claims 4-7, 14, 15, 19, 20, and 23 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

5. Response to Arguments filed 4-7-2006

A...on pages 3 and 4 concerning Sannino, applicant contends that waist portions 222 of Sannino are taught by the reference to develop substantial ambient pressure during flight and that this stands in stark contrast from the ambient fluid pressure the recessed pressurization surface of claim 1 is adapted to provide, i.e., above-ambient fluid pressure when the slider is in nominal flight, which is greater than fluid pressure provided elsewhere on a trailing half of the aerodynamic surface at a substantial displacement from a longitudinal centerline of the aerodynamic surface".

In response, the Examiner notes he does not see the language of Sannino as being in stark contrast with the claim language in question. If Sannino stated that little ambient fluid pressure was developed, that would be in stark contrast. But Sannino states that substantial ambient pressure is developed and this is viewed as being consistent with and anticipatory of the claim language in question.

B...on page 5 and 6 applicant makes similar arguments concerning Griffin, and the Examiner's response concerning Griffin is similar to that concerning Sannino. The Examiner's position is that the structure of Sannino and griffin is similar to that of the instant invention such that a similar function would be expected thereof.

6. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the

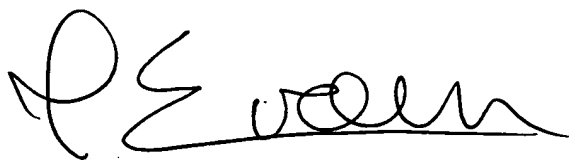
Art Unit: 2627

shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jefferson A. Evans whose telephone number is 571-272-7574. The examiner can normally be reached on Monday to Friday, 9:00am to 5:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hoa Thi Nguyen can be reached on 571-272-7579. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



JAE
June 27, 2006

Jefferson A. Evans
Primary Examiner
Art Unit 2627

**JEFFERSON EVANS
PRIMARY EXAMINER**